SOLDATOV, S.N.

Physical maps for schools with information for regional studies.
Geod. i kart. no.7:33-37 Jl '63. (MIRA 16:8)
(Physical geography--Maps)

SOLDATOV, S.N.; KREMPOL'SKIY, V.F.

Speeding up the compiling of maps and atlases. Geod. i kart. no.9: 50-52 S '63. (MIRA 16:10)

SOLDATOV, S.N., st. red.

[Atlas of Vologda Province] Atlas Vologodskoi oblasti. Moskva, 1965. 38 p. (MIRA 18:4)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.

1. SOLDATOV, T. O.

2. USSR (600)

4. Pheasants

7. Friends of the sun. Priroda 42, No. 5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KHOMYAKOV, N., inzh. (Moskva); VAYNSHTEYN, G., inzh. (Moskva); KUZOVKIN, B.; LINTS, V., inzh. (Moskva); VOLIN, P. (Vil'nyus); GRYUKOV, N., inzh. (Moskva); SOLDATOV, V., inzh.-konstruktor (Orsk)

Conceived and realized. Izobr. i rats. no.4:34-35 '63. (MIRA 16:7)

1. Starshiy inzh. tresta "Orenburgtransstroy", Orenburg (for Kuzovkin).

(Technological innovations)

KHORKHORIN, S.; SOLDATOV, V.

Automatic protection of boilers. Pozh.delo 10 no.1:6-7 Ja '64.
(MIRA 17:2)

POD"YACHIKH, P.G., red.; OREKHOV, K.A., otv. za vypusk; SOLDATOV, V.A., red.; PYATAKOVA, N.D., tekhn. red.

[Rezults of the 1959 all-Union population census; the Tajik S.S.R.] Itogi Vsesoiuznoi perepisi naseleniia 1959 goda; Tadzhikskaia SSR. Moskva, Gosstatizdat, 1963. 139 p. (MIRA 16:5)

1. Russia (1923- U.S.S.R.) TSentral'noye statisticheskoye upravleniye. 2. Chlen Kollegii TSentral'nogo statisticheskogo upravleniya SSSR, nachal'nik Upravleniya po provedeniyu Vsesoyuznoy perepisi naseleniya (Pod"yachikh).
(Tajikistan--Census)

LUR'YE, Aleksandr L'vovich; SOLDATOV, V.A., red.

[Methods of linear programming and their application in economics] Metody lineinogo programmirovaniia i ikh primenenie v ekonomike. Moskva, Statistika, 1964. 81 p. (MIRA 18:1)

KUSHKINA, R.I., red.; SOLDATOV, V.A., red.; FYATAKOVA, N.D., tekhn. red.

[National economy of the R.S.F.S.R. in 1962; statistical yearbook] Narodnoe khoziaistvo RSFSR v 1962 godu; statisticheskii ezhegodnik. Moskva, Gosstatizdat, 1963. 607 p. (MIRA 16:12)

(Russia—Statistics)

SOLDATOV, Vadim Davydovich; OLEYNICHUK, Konstantin Ivanovich; KASPERSKAYA, Ye. vedushchiy redaktor; PATSALYUK, P., tekhnicheskiy redaktor

[Food industry mechanic's handbook] Spravochnik mekhanika pishchevoi promyshlennosti. Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1956. 363 p. (MLRA 10:4)

(Food industry--Equipment and supplies)

SOLDATOV, Vasiliy Dmitriyevich; VINNITSKIY, S.[Vinnyts'kyi, S.], red.; MOLCHANOVA, T., tekhn. red.

[Crucial crop] Vyrishal'na kul'tura. Odesa, Odes'ke knyzhkovo vyd-vo, 1959. 25 p. (MIRA 15:6)

1. Sekretar Odes'kogo oblastnogo komiteta Kommunisticheskoy partii Ukrainy (for Soldatov).
(Ukraine--Corn (Maize))

SOLDATOV, V.M.; RYABOV, A.V.

Preparation of new symmetrical triazines. Reaction of N-phenyl (β-mercaptoethyl)amine with cyanuric chloride, 2,4-diphenylamino-6-chloro-1,3,5-triazine, and 2-phenylamino-4,6-dichloro-1,3,5-triazine. Trudy po khim. i khim.tekh. no.1:110-112 '64.

(MIRA 18:12)

1. Submitted January 8, 1964.

KOSEVICH, V.M.; SOLDATOV, V.P.; Prinimali uchastiye: MOROZ, N.G., student; KRIVKO, A.P., student.

Experimental etching of zinc single crystals. Kristallografiia 6 no.3:439-442 My-Je '61. (MIRA 14:8)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I. Lenina.
(Zinc crystals)

BASHMAKOV, V.I.; SOLDATOV, V.P.

Certain properties of the boundaries of residual twinning streaks. Fiz. met. i metalloved. 16 no.5:768-775 N '63. (MIRA 17:2)

1. Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR.

ACCESSION NR: AP4039652 S/0181/64/006/006/1671/1674

AUTHORS: Soldatov, V. P.; Startsev, V. I.

TITLE: Elastic twinning in bismuth crystals

SOURCE: Fizika tverdogo tela, v. 6, no. 6, 1964, 1671-1674

TOPIC TAGS: elastic twinning, bismuth, lattice defect, twin wedging

ABSTRACT: The setup for inducing elastic twinning is illustrated in Fig. 1 on the Enclosure. The load was measured by a slotted spring dynamometer with an indicator (with a precision of 25 g). The sample was immersed in liquid nitrogen for the experiment. Twinning developed in Bi at this temperature by the appearance of elastic twins, much like the growth of twins in calcite and antimony at room temperature. At some value of internal stress, thin wedge-like twin layers formed under the knife edge or near it, growing with increase in load. In their experiments, the authors were unable to determine any definite relationship between thickness and length of the elastic twins. It was necessary always to apply some finite load to the crystal to induce the elastic twinning. This value varied from experiment to experiment, but was always small, near 0.3-0.5 kg. This suggests some incipient mechanism for the formation of such twins. The actual causes may

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ACCESSION NR: AP4039652

be many. It is concluded that each act of acquiring and of losing twinning leaves its trace in the crystal. Defects are apparently formed in the crystal lattice where twinning develops, and these defects accumulate with increase in number of loading cycles, facilitating the wedge-like growth of the elastic twins. Gliding may be an important factor in this twin growth. Orig. art. has: 4 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR Kharkov (Physicotechnical Institute of Low Temperatures AN UkrSSR)

ENCL: 01

SUBMITTED: 17Dec63

NO REF SOV: 006

OTHER: 000

SUB CODE: SS

ACCESSION NR: AP4039652

ENCLOSURE: 01

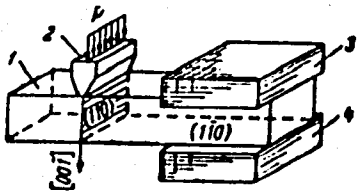

Fig. 1. Setup for deforming samples
1- sample; 2- knife edge; 3- cleats.

Card 3/3

ACC NR: AP6017112 (A) SOURCE CODE: UR/0126/66/021/005/0793/0795

AUTHORS: Lavrent'yev, F. F.; Soldatov, V. P.; Kosarev, Yu. G.

ORG: Institute of Physics and Technology of Low Temperatures, AN UkrSSR (Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR)

TITLE: Growth of single crystals of zinc and bismuth of given form and crystallographic orientation

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 5, 1966, 793-795

TOPIC TAGS: zinc, bismuth, metal crystal, single crystal

ABSTRACT: An apparatus for the growth of metal single crystals of predetermined form and crystallographic orientation is presented. The developed apparatus supplements the device developed by Yu. V. Sharvin and V. F. Gantmakher (PTE, 1963, No. 6, 165). A schematic of the apparatus is presented (see Fig. 1). The performance of the apparatus was tested by growing zinc and bismuth single crystals. It is concluded that the method should prove useful for growth of single crystals of other high-melting metals.

Card 1/2 UDC: 669-172:546.87

L 36108-66
ACC NR: AP6017712

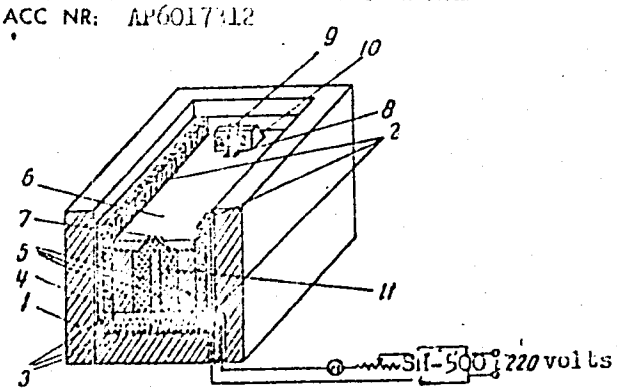

Fig. 1. Schematic of the installation for the growth of single crystals of zinc and bismuth. 1 - pyrophyllite box, 2 - box sections, 3 - heaters, 4 - pyrophyllite support, 5 - prismatic blocks, 6 - top, 7 and 8 - openings for control and addition of melt, 9 - seed, 10 - orienting support, 11 - melt.

Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 23Jul65/ ORIG REF: 005

Card 2/2

SOLDATOV, V.P.; STARTSEV, V.I.

Equilibrium shape of a twin whose growth is inhibited by an obstacle.
Dokl. AN SSSR 166 no.3:588-591 Ja '66.
(MIRA 19:1)

1. Fiziko-tekhnicheskiy institut nizkikh temperatur AN SSSR.
Submitted June 10, 1965.

ACC NR: AP7001978 SOURCE CODE: GE/0030/66/018/002/0863/0871

AUTHOR: Startsev, V. I.; Soldatov, V. P.; Brodsky, M. M.

ORG: Physicotechnical Institute for Low Temperatures, Ukrainian Academy of Sciences, Kharkov

TITLE: Growth rate of twin layer in bismuth single crystals

SOURCE: Physica status solidi, v. 18, no. 2, 1966, 863-871

TOPIC TAGS: bismuth, ~~bismuth crystal~~, single crystal growth, twinning, single crystal, activation energy

ABSTRACT: An attempt is made to determine the stress relationship of the normal and tangential rate of twinning in bismuth single crystals of different purities. On the basis of experimental data, it is concluded that the broadening of twin layers occurs by a heterogeneous mechanism. The activation energy is determined for the processes of twin layer broadening and twin growth in the direction of shear. It is established that the process of twin layer broadening in bismuth involves the simultaneous reorientation of about 10^4 atomic planes and

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ACC NR: AP7001978

that the 10 to 10^2 twinning dislocations participate in each plane per centimeter length of twin plane in the direction of shear. The authors thank S. N. Komnik, F. F. Lavrentov, V. B. Pariiskii, and V. Z. Bengus for valuable discussions. Orig. art. has: 8 figures and 15 formulas. [Based on authors' abstract] [NT]

SUB CODE: 20/SUBM DATE: 01Aug66/ORIG REF: 006/OTH REF: 009/

Card 2/2

LAPOV, S.F.; SOLDATOV, V.S. (g. Arkhangel'sk)

Trepanopuncture of the frontal simus. Zhur. ush., nos. i gorl. bol. 23 no.4:91-92 Jl-Ag'63. (MIRA 16:10)
(FRONTAL SINUS — SURGERY)

STAROBINETS, G.L.; SOLDATOV, V.S.

Thermodynamics of ion exchange. Dokl.AN BSSR 6 no.4:233-236 Ap '62. (MIRA 15:4)

1. Belorusskiy gosudarstvennyy universitet imeni V.I.Lenina. Predstavleno akademikom AN BSSR N.F.Yermolenko.
(Ion exchange) (Thermodynamics)

L 11054-63 EWT(m)/BDS--ASD--RM

ACCESSION NR: AP3000473 S/0153/63/006/001/0068/0071

52
51

AUTHOR: Soldatov, V. S.; Starobinets, G. L.

TITLE: Investigating the temperature dependence of the apparent equilibrium constants of ion exchange processes

SOURCE: Izv. VUZ: Khimiya i khim. tekhnologiya, v. 6, no. 1, 1963, 68-71

TOPIC TAGS: ion exchange equilibrium, ion exchange resins, thermodynamic constants, apparent equilibrium constants, Li separation, alkali metals, ion exchange

ABSTRACT: The ion exchange equilibrium was studied in sulfonated styrene ion exchange resins containing 6.5, 10.5, and 25% divinylbenzene (DVB) at 0.1, 25, 60 and 90 degrees for Li-H and Ca-H ions; the thermodynamic and apparent equilibrium constants were calculated. These were found dependent on temperature, degree of resin netting and phase of the ion exchanger. For Ca the equilibrium constant decreased with temperature increase and increased with DVB increase, k always greater than 1; for Li decreases noticeably with temperature decrease, k always less than 1. For example, at 90 degrees in resin containing 6.5% DVB, the apparent equilibrium constants for Cs and Li, k = 2.6 and 0.81 respectively; at 0 degrees, 25% DVB, the separation is more than 200 to 1. This phenomenon offers a means of separating Li from other alkali metals by ion exchange.

Card 1/2

Belorussian State University

SOLDATOV, V.S.; STAROBINETS, G.L.

Study of the thermodynamic functions of ion exchange processes. Izv. vys. ucheb. zav.; khim. i khim. tekh. 6 no.3:420-424 '63. (MIRA 16:8)

1. Belorusskiy gosudarstvennyy universitet imeni Lenina, kafedra analiticheskoy khimii.
(Ion exchange) (Thermodynamics)

L 12790-63 BDS/EWP(q)/EWT(m) AFFTC/ASD JD
ACCESSION NR: AP3000784 S/0070/63/008/003/0461/0462

AUTHOR: Shalimova, K. V.; Morozova, N. K.; Soldatov, V. S.

TITLE: The crystalline structure of zinc-sulfide films

SOURCE: Kristallografiya, v. 8, no. 3, 1963, 461-462

TOPIC TAGS: crystal growth, crystal structure, ZnS, x-ray diffraction, A, HS

ABSTRACT: The authors made detailed studies of the crystal structure of ZnS films in relation to temperature and material of the substrate and also in relation to the atmosphere, structure of initial powder and fusing temperature of this powder. They prepared films from both cubical and hexagonal forms of powder on glass and quartz substrates at temperatures from 20 to 800C. The experiments showed that temperature of the evaporator and structure of the initial material have no effect on the crystal structure of the films. This structure depends chiefly on temperature of the substrate at the moment the film forms on it. It also depends on the atmosphere in which the film is deposited and on the material of the substrate. At lower temperatures (200-300C) the structure is generally that of zinc blende if the substrate is glass, but it is hexagonal if the substrate is quartz; and this film forms at somewhat lower temperature in a vacuum (220C) than in HS (300C). Mixtures of both structures are deposited at higher temperatures,

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L 12790-63
ACCESSION NR: AP3000784

but the cubic phase is dominant on quartz substrates at a temperature of 700C, whereas films formed in the 400-470C range on glass substrates exhibit hexagonal structure exclusively. The cubic phase appears suddenly and abundantly, however, on cooling below 400C or heating above 470C. Orig. art. has: 4 figures. [Abstracter's note: 4 figures referred to in text but no graphics accompany article.]

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering)

SUBMITTED: 27Dec62 DATE ACQ: 21Jun63 ENCL: 00

SUB CODE: 00 NO REF SOV: 002 OTHER: 007

Card 2/2

45144

S/076/63/037/002/005/018
B101/B186

AUTHORS: Starobinets, G. L., Soldatov, V. S. (Minsk)

TITLE: Thermodynamics of the ion exchange on sulfonated styrene - divinyl benzene copolymers

PERIODICAL: Zhurnal fizicheskoy khimii, v. 37, no. 2, 1963, 294-300

TEXT: To complete missing data, and to study the temperature effect on the selectivity of the ion exchange, the thermodynamics was investigated when Li^+, Na^+, K^+, Rb^+ and Cs^+ cations were exchanged at 0, 25, 60 and 90°C for a proton on the KU-2X6 (KU-2Kh6) cationite, a sulfonated polystyrene containing 6% divinyl benzene. The thermodynamic data (Table 1) were calculated using the method suggested by A. W. Davidson, W. J. Argersinger, jr. (Ann. N. Y. Acad. Sci., A 57, 3105, 1953) and F. Högfeldt (Arkiv Kemi, 5, 147, 1953), on an Ural-1 high-speed computer. The activity coefficients were calculated according to Duhem-Margulies. Results: The $T\Delta S$-versus-ΔH function is linear. The straight line for K^+, Rb^+ and Cs^+ is situated by 200 cal higher than that for Li^+ and Na^+. The higher entropy observed in the exchange of K^+, Rb^+, Cs^+ as compared to that of Li^+, Na^+ is explained

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Thermodynamics of the ion ...

by the "negative near hydration" of these ions leading to a stronger binding between cation and ionite and to the formation of ion pairs. This is also confirmed by the different coefficient of selectivity $K_{H^+}^{M^+}$ with poor filling. With 0.1 filling and 0°C, $K_{H^+}^{M^+}$ is for Cs^+ ~7.3, Rb^+ ~5.0, K^+ ~3.0, Na^+ ~1.5, and Li^+ ~0.8. With 0.9 filling, all $K_{H^+}^{M^+}$ approach the value ~1.6, except Li^+ (~0.5). In dilute solution, the activity coefficients are for K^+, Rb^+, Cs^+ lower than for Li^+ and Na^+. The concept of O. Ya. Samoylov (Struktura vodnykh rastvorov elektrolitov i gidratatsiya ionov [Structure of aqueous electrolyte solutions and hydration of ions], Izd-vo AN SSSR, M., 1957, 76) on the hydration of the ions as statistic process is important for the interpretation of the selectivity of the ion exchange. There are 4 figures and 1 table.

ASSOCIATION: Belorusskiy gosudarstvennyy universitet im. V. I. Lenina (Belorussian State University imeni V. I. Lenin)

SUBMITTED: July 20, 1961

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Thermodynamics of the ion ...

Table. The true equilibrium constants, K, and the thermodynamic functions of the exchange on the KU-2Kh6 cationite.
Legend: Кал = cal, Эв = ev

T	K	ΔF°, кал.	ΔH°, кал	TΔS°, кал	ΔS°, эв
		$Li^+ - H^+$			
273,3	0,71	187	418	231	0,9
298,2	0,76	163	377	215	0,7
333,2	0,80	151	268	117	0,4
363,2	0,82	145	208	63	0,2
		$Na^+ - H^+$			
273,3	1,61	—259	—1206	—947	—3,5
298,2	1,31	—158	—985	—827	—2,8
333,2	1,15	— 92	—685	—593	—1,8
363,2	1,06	— 43	—613	—536	—1,6
		$K^+ - H^+$			
273,3	2,56	—509	—1650	—1141	—4,3
298,2	1,95	—397	—1430	—1033	—3,5
333,2	1,57	—299	—1300	—1001	—3,0
363,2	1,33	—207	—1200	— 993	—2,8

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Thermodynamics of the ion ...

		$Rb^+ - H^+$			
273,3	2,84	—568	—1972	—1404	—5,2
298,2	2,05	—424	—1601	—1177	—4,0
333,2	1,65	—333	—1284	— 953	—2,9
363,2	1,44	—263	—1184	— 921	—2,6
		$Cs^+ - H^+$			
273,3	3,23	—647	—1997	—1350	—5,1
298,2	2,30	—495	—1568	—1073	—3,7
333,2	1,90	—378	—1300	— 922	—2,9
363,2	1,61	—344	—1200	— 856	—2,5

Card 4/4

SOLDATOV, V.S.; STAROBINETS, G.L. (Minsk)

Thermodynamics of ion exchange on sulfonated copolymers of styrene and divinylbenzene. Part 2. Zhur. fiz. khim. 38 no 3: 681-685 Mr '64. (MIRA 17:7)

1. Belorusskiy gosudarstvennyy universitet.

STAROBINETS, G.L.; SOLDATOV, V.S.

Thermodynamics of ion exchange on sulfonated copolymers of styrene and divinylbenzene. Part 3. Zhur. fiz. khim. 38 no.4:992-995 Ap '64. (MIRA 17:6)

1. Belorusskiy gosudarstvennyy universitet.

L 11300-65 EWT(m) Pc-4 ESD(gs)/ASD(d)/AFWL/ASD(a)-5/SSD/ASD(p)-3/ASD(m)-3/
AFETR/AS(mp)-2/AEDC(a) RM
ACCESSION NR: AP4041753 S/0076/64/038/006/1523/1529

AUTHOR: Soldatov, V. S. ; Starobinets, G. L.

TITLE: Thermodynamics of ion exchange on sulfonated styrene -- divinylbenzene copolymers. IV Activity coefficients of resinates.

SOURCE: Zhurnal fizicheskoy khimii, v. 38, no. 6, 1964, 1523-1529

TOPIC TAGS: activity coefficient, ion exchange, lithium, cesium, silver, thallium, standard state, thermodynamics

ABSTRACT: The purpose of this study was to calculate the activity coefficients and to analyze the obtained results. In choosing a standard state a condition was imposed -- that the standard state must be such that resinates with the same activity coefficients would be equivalent energywise and that their mixing would not lead to change of the energy of the system. Consequently, in the standard state

$$\Delta F^{0} = -RT \ln K = 0$$

where F^{0} is Gibbs free energy and K is the thermodynamic equilibrium constant. With such a condition one could determine only the ratio of activity coefficients,

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ACCESSION NR: AP4041753

and consequently it becomes necessary to choose a "standard" resinate with respect to which one could conduct the calculation of activity coefficients. Since in this case the exchange always involves H^+ ion, then it was convenient to choose the swollen ionite in H^+ form as the standard state. The authors calculated the activity coefficients of mixed resinates $M^+ - H^+$ for all simple monovalent metal cations which are stable in aqueous solutions: Li, Na, K, Rb, Cs, Ag and Tl. The main relationships of the activity coefficients have been established as a function of temperature, lattice structure and composition of resins. It was found that temperature increase, decrease in the lattice structure and decrease of the difference between the sizes of exchanging ions always lead to the formation of more ideal resinate. Orig. art. has: 4 figures

ASSOCIATION: Belorusskiy gosudarstvennyy universitet (Belorussian State University)

SUBMITTED: 18Jun63 ENCL: 00

SUB CODE: IC, TD NO REF SOV: 007 OTHER: 005

Card 2/2

SOLDATOV, V.S.

New variant of the thermodynamic study of ion-exchange processes. Dokl. AN BSSR 9 no.3:169-171 Mr '65.
(MIRA 18:6)

1. Institut obshchey i neorganicheskoy khimii AN BSSR.

L 31124-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG

ACCESSION NR: AP5007149 S/0286/65/000/003/0016/0016

AUTHOR: Tikavyy, V. F.; Soldatov, V. S.; Starobints, G. L.; Labetskiy, V. A. 20 B

TITLE: A method for separating ions from alkali metals. Class 12, No. 167826

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 3, 1965, 16

TOPIC TAGS: ion exchange, ion separation, alkali metal, zirconium compound

ABSTRACT: This Author's Certificate introduces a method for removing ions from alkali metals by ion exchange based on zirconium polyphosphate. In order to improve the ion separation process, ions are exchanged from salt, oxide and base solutions.

ASSOCIATION: none

SUBMITTED: 04Feb64 ENCL: 00 SUB CODE: GC

NO REF SOV: 000 OTHER: 000

Card 1/1

L 29102-65 EWT(m)/EWG(m) RM/RWH/JD/JW

ACCESSION NR: AP5004351 S/0076/65/039/001/0030/0034

AUTHORS: Soldatov, V. S. (Minsk); Starobinets, G. L. (Minsk)

TITLE: Thermodynamics of ion exchange on sulfonated styrene and divinylbenzene copolymers. 5. On the possibility of simulating an ion-exchange process

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 1, 1965, 30-34

TOPIC TAGS: copolymer, electrolyte, ionic charge, entropy, enthalpy, equilibrium constant, simulation test

ABSTRACT: An attempt was made to simulate a concentrated electrolyte solution ion-exchanger containing various types of ions. The exchange process in this model is represented by $(I_1^+A^-)_{c_1} + (I_2^+)_{\infty} \rightleftarrows (I_2^+A^-)_{c_2} + (I_1^+)_{\infty}$, and expressions are given for entropy change and total enthalpy change in the exchange process. The ion-exchanger selected was 6.5% divinylbenzene. The list of the cations, anions, and the electrolyte activation coefficients is given in a table. The results show that different electrolytes have various activation coefficients and have different departures from the ideal case. The entropy, enthalpy, free energy change, and the activation coefficient (equilibrium constant) ratio are then compared with the experimental values. The agreement is found to be generally poor. For each electrolyte, an

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L 29102-65

ACCESSION NR: AP5004351

agreement was found between some properties but not between the others. The general conclusion is that the simulation model is inadequate. Orig. art. has: 2 tables.

ASSOCIATION: Akademiya nauk BSSR, Institut obshchey i neorganicheskoy khimii (Academy of Sciences BSSR, Institute of General and Inorganic Chemistry)

SUBMITTED: 25Sep63 ENCL: 00 SUB CODE: GC, OC

NO REF SOV: 005 OTHER: 012

Card 2/2

L 33322-65 EWT(m)/EWG(m)/EWP(t)/EWP(b) IJP(c) EWH/JD/JW/JG/RM

ACCESSION NR: AP5004352 S/0076/65/039/001/0035/0039

35
34
B

AUTHORS: Soldatov, V. S. (Minsk); Starobinets, G. L. (Minsk)

TITLE: On the thermodynamics of ion-exchange of sulfonated styrene-divinylacetylene copolymers

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 1, 1965, 35-39

TOPIC TAGS: ion exchange, styrene, copolymer, alkali metal, silver, thallium, hydrogen, thermodynamic property, hydration, dielectric permeability, network density

ABSTRACT: Exchanges of alkali metal ions, of silver and thallium ions and of hydrogen ions were studied. Alkali ions fall into two subgroups. In the lithium and sodium subgroup the apparent equilibrium constants and thermodynamic functions are almost independent of ionic compositions: the coefficients of activity of the resinates are constant; function $T\Delta S^0 = f(\Delta H^0)$ remains unchanged; the swelling of the ionites is large and depends strongly on the ionic radius. In the potassium, rubidium, and cesium subgroup ion exchanges cause sharp drops of equilibria constants and of thermodynamic properties with the saturation of the

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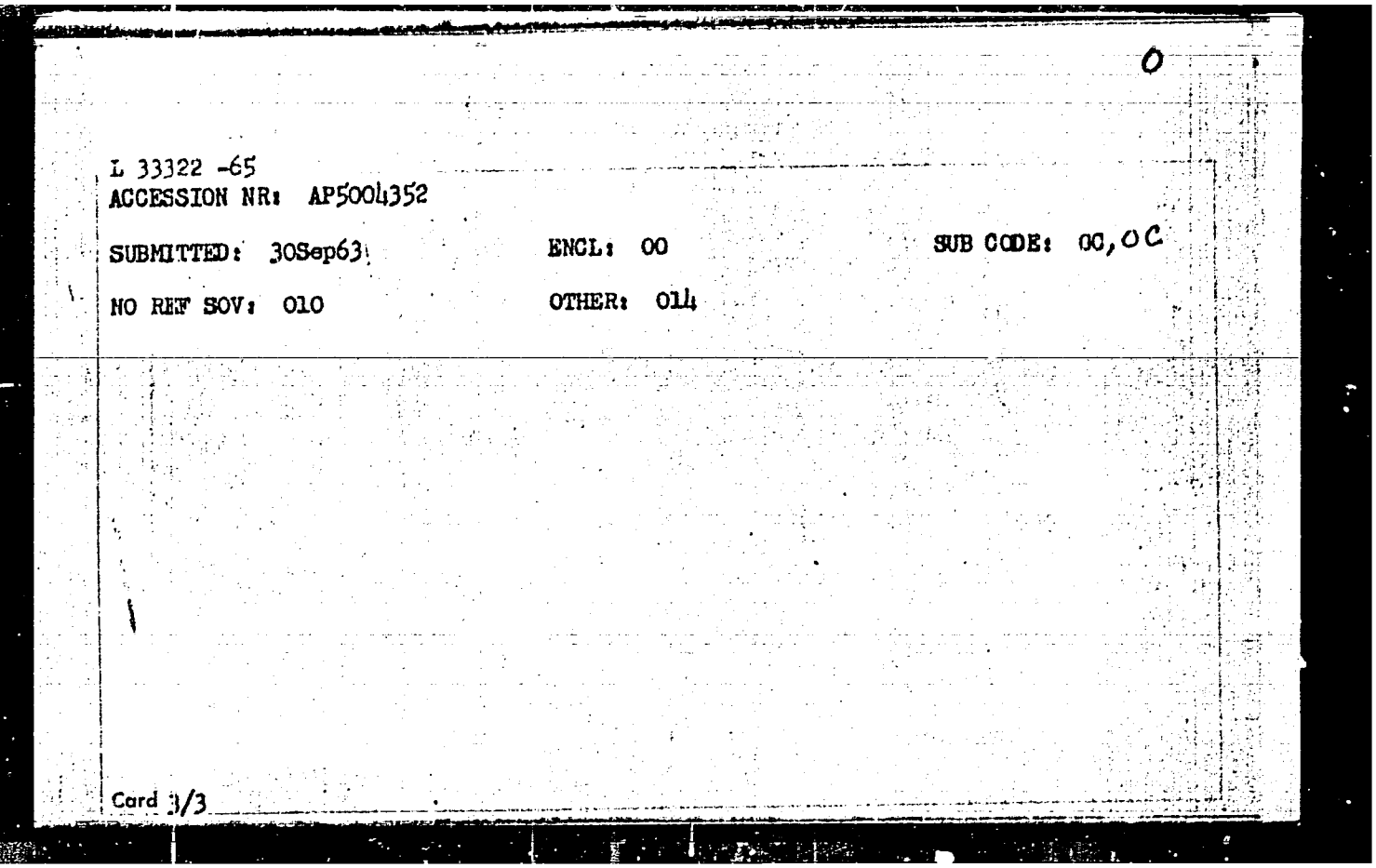
L 33122-65
ACCESSION NR: AP5004352

resin by metallic ions; the coefficients of activity change considerably, and function $T\Delta S^0 = f(\Delta H^0)$, though constant within the group, differs from the function for lithium and sodium ions . The exchange of silver and thallium ions depends on their properties of strong polarizers and on the power of hydration which is strong in silver and weak in thallium. The exchanges of silver and hydrogen ions on resins of medium and high network densities depend on some factor which favors the decrease of apparent equilibrium constants with the saturation of the ionite by metallic ions. On low density networks this factor is practically absent. The binding is not entirely ionic and the interactions are not entirely coulombic. Decreases of dielectric permeability increase the interactions of ions. Changes of entropy are weakly negative or positive during silver hydrogen exchange. Thallium-hydrogen exchange is similar to the silver-hydrogen exchange, with a slight difference caused by the lack of hydration in thallium. In the ionite phase, lithium and sodium do not enter into ionic interaction, while potassium, rubidium, and cesium are partially bound to short ionic couples, and silver and thallium ions are bound to couples closely related to nondissociated molecules. Orig. art. has: 3 tables and 2 formulas.

ASSOCIATION: Akademiya nauk BSSR, Institut obshchey i neorganicheskoy khimii (Academy of Sciences BSSR, Institute of General and Inorganic Chemistry)

Card 2/3



L 33322 -65
ACCESSION NR: AP5004352

SUBMITTED: 30Sep63 ENCL: 00 SUB CODE: 00,0C

NO REF SOV: 010 OTHER: 014

Card 3/3

STAROBINETS, G.L. [Starobinets, H.L.]; SOLDATOV, V.S. [Saldatau, V.S.]

Thermodynamic function of ion-exchange equilibria. Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.3:69-74 '62. (MIRA 18:3)

[redacted], V.S.; [redacted], O.L.

Thermodynamics of ion exchange on sulfonated copolymers of styrene and divinylbenzene. Part 4. Zhur. fiz. khim. 38 no.6: 1523-1529 Je '64. (MIRA 18:3)

1. Belorusskiy gosudarstvennyy universitet, Minsk.

L 42982-65 EWT(1)/EWT(m) AT/DS/PH

ACC NR: AR6014101 SOURCE CODE: UR/0272/65/000/011/0124/0125

AUTHORS: Bogolyubov, Ya. Kh.; Peryshkina, N. G.; Soldatov, V. S.

TITLE: A calorimeter for measuring thermal effects accompanying ion exchange processes

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 11.32.1108

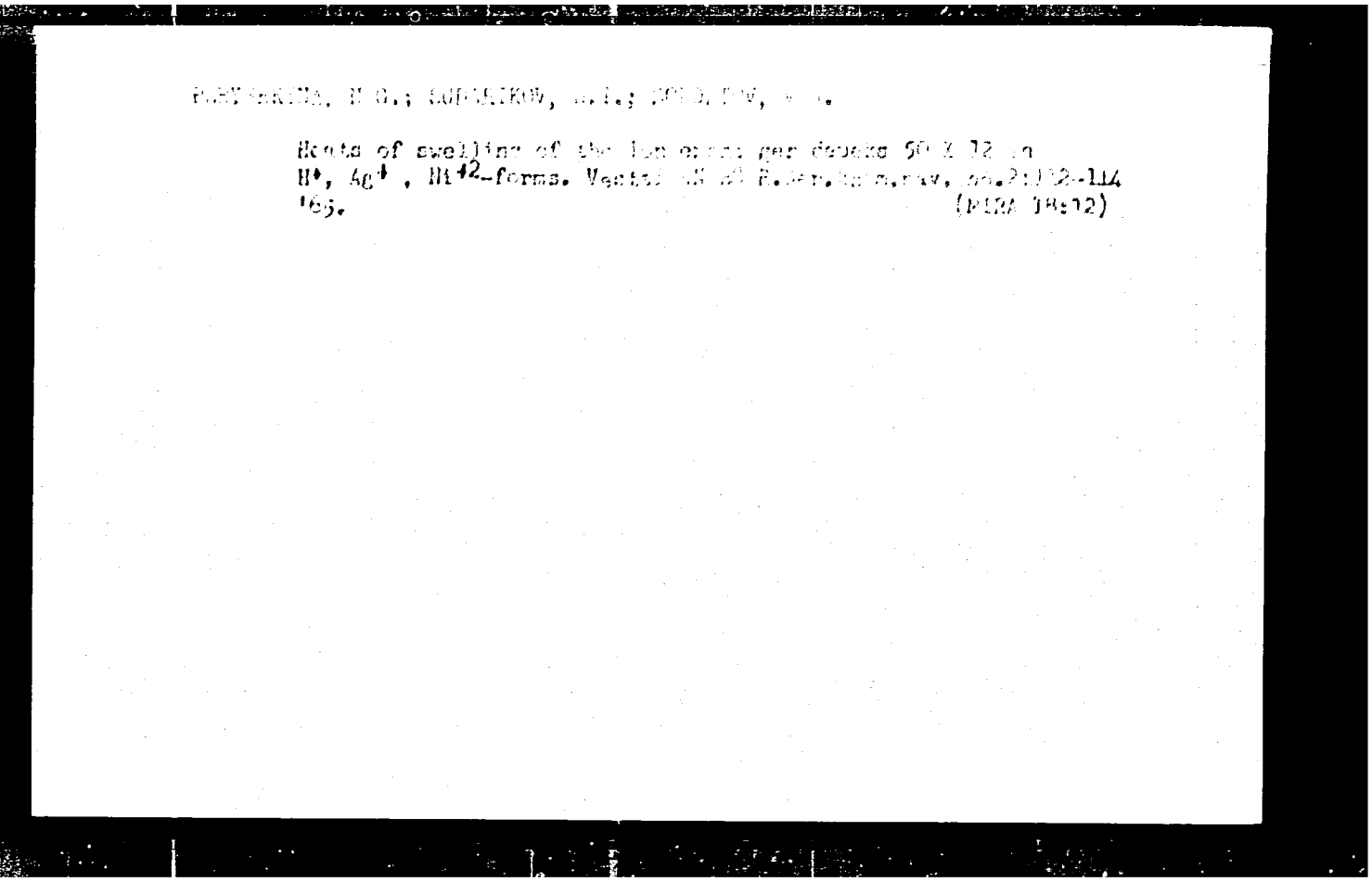
REF SOURCE: Izv. AN BSSR. Ser. khim. n., no. 1, 1965, 35-38

TOPIC TAGS: calorimeter, calorimetry, ion exchange, thermistor / MMT-1 thermistor

ABSTRACT: The calorimeter described here makes it possible to conduct an experiment isothermally and adiabatically, the latter condition being attained automatically by a special apparatus maintaining an equal temperature within the calorimeter and in the casing (maximum difference 0.01--0.2C). The thermal process is conducted in a hermetically sealed vessel of small volume (50 cm^3), well isolated from the external medium. Measurements are taken with a thermistor of type MMT-1 sensitive to 0.0005C. Thermal effects are measured with an accuracy of 0.5--1.0%. Yu. Vaysberg
[Translation of abstract]

SUB CODE: 14

Card 1/1 hs UDC: 389:536.628.3



SOKHATOV, V. A.; [illegible], L. V.

Sorptive properties of weakly acid cation exchangers. Part 1.
Zhur. fiz. khim. 39 no.11:2720-2725 N '65.
(MIRA 18:12)

1. Institut obshchey i neorganicheskoy khimii AN BSSR.

SOLDATOV, V.S.; STAROBINETS, G.L. (Minsk)

Thermodynamics of ion exchange on sulfonated styrene and divinylbenzene copolymers. Report No. 5. Zhur. fiz. khim. 39 no. 1:30-34 Ja '65 (MIRA 19:1)

Thermodynamics of ion exchange on sulfonated styrene and divinylbenzene copolymers. Report 6. Ibid.:35-39.

Surface molecular properties of alpha-alkylthiophanes. Ibid.:168-170.

1. Institut obshchey i neorganicheskoy khimii AN Belorusskoy SSR. Submitted December 10, 1963.

L 31513-66 EWT(m)/EWP(j) IJP(c) DS/RM

ACC NR: AP6008094 SOURCE CODE: UR/0076/66/040/002/0434/0437

40
B

AUTHOR: Pokrovskaya, A. I.; Soldatov, V. S.

ORG: Institute of General and Inorganic Chemistry, Academy of Sciences, BSSR (Institut obshchey i neorganicheskoy khimii Akademii nauk BSSR)

TITLE: Selective properties of ion exchange resins prepared from chloroprene rubber

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 2, 1966, 434-437

TOPIC TAGS: ion exchange resin, chloroprene, sulfonation, alkali metal

ABSTRACT: The selectivity of the exchange of hydrogen for Li^+, Na^+, and K^+ was studied on ion exchange resins obtained by sulfonating chloroprene rubber with fuming sulfuric acid. This polymer was chosen for the study because its structure can be easily altered by physical effects. The capacities, swelling, and selectivity of the resins obtained were determined. The nature of the matrix was found to have a considerable influence on the selectivity. In order to elucidate the effect of order in the orientation of the chains of the resins on their selectivity, a resin was prepared by sulfonating the rubber in the stretched state. Stretching was found to affect the selectivity considerably, causing an increased affinity of H^+ ions for the resin. A structural interpretation of this behavior is given. Irradiation of the resin with ultraviolet light also confirmed the hypothesis that a pretreatment of the initial polymer can

UDC: 543.544

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L 31513-66
ACC NR: AP6008094

be used to alter its adsorption selectivity. Orig. art. has: 4 figures.

SUB CODE: 07 / SUBM DATE: 30Dec64 / ORIG REF: 005 / OTH REF: 004

Card 2/2 mc

ACC NR: AP6023070

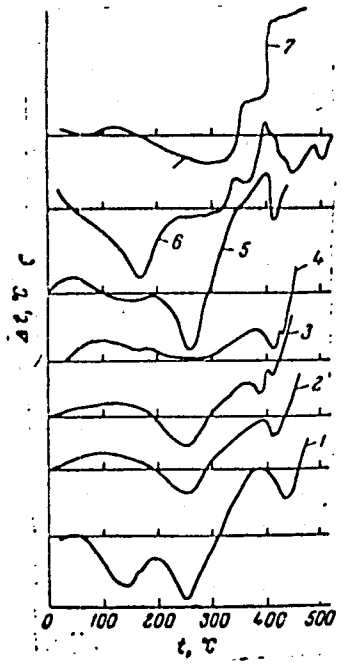


Figure 1. Differential thermograms
Curves 1-4: H^+-form, air-dried ionite, heat treated at 110, 160, 200, and 260C
Curve 5: specimen heat-treated at 200C with the exchange volume restored by alkali, dried at 100C
Curve 6-7: specimens of the K^+-form, air-dried and heat-treated at 160C, respectively

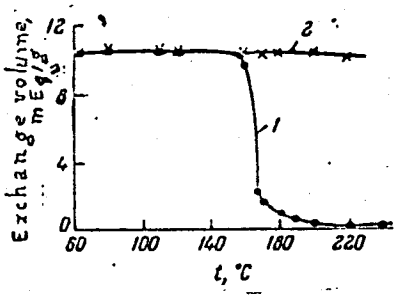
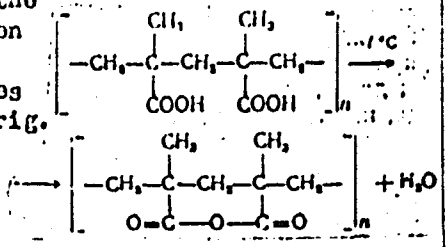


Figure 2. Temperature dependence of the exchange volume of the ionite
Curve 1: heat-treated ionite
Curve 2: specimens of the same ionite heat-treated and treated with alkali (hence converted to H^+- form to determine the exchange volume)
[Abstractor's Note: It seems that the unit of exchange volume is in error. In the text it was given as mgEq/g. In the Figure the Russian letter for g is omitted.]

L 08911-67
ACC NR: AT6023070

ture between 160-260C and the corresponding minimum at 260C (curves 1, 2 in Figure 1) are conjectured to result due to the deformation of a polymeric anhydride: The elementary analysis of the original and heat-treated ionite confirm this conjecture. The heat resistance of the ionite was studied under production conditions, i.e. when the ionite was exposed to hot electrolytes at pH> 8 and subsequent regeneration. The heat treatment not only does not reduce the exchange volume but even increases it. Orig. art. has: 5 fig. and 1 formula.



SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 002

Card 3/3

SOLDATOV, V.V.

Morphological changes in the mast cells of the skin under the influence of different balneological factors. Vop.kur. fizioter. i lech. fiz. kul't. 27 no.5:420-429 S-O'62. (MIRA 16:9)

1. Iz patomorfologicheskoy laboratorii (zav.-kand.med.nauk G.K.Gersamiya, konsul'tant - prof. L.I.Gromov) eksperimental'nogo otdela (zav.-prof. F.D. Vasilenko)TSentral'nogo instituta kurortologii i fizioterapii (dir. - kand.med.nauk G.N.Pogpelova)
(MAST CELLS) (BATHS, MEDICATED)

SORKIN, I.E., prof.; MELESHKEVICH, M.P., kand.med.nauk; GRINCHAR, A.N.; SOLDATOV, V.Ye.

Treatment of tuberculous meningitis in adults without subarachnoid injection of drugs [with summary in French]. Probl.tub. 34 no.5: 13-19 S-O '56. (MIRA 10:11)

1. Iz meningitnogo otdeleniya dlia vzroslykh (zav. - prof. I.E. Sorkin) Gosudarstvennogo nauchno-issledovatel'skogo instituta tuberkuleza Ministerstva zdravookhraneniya RSFSR (dir. V.F.Chernyshev, zam. direktora po nauchnoy chasti-prof. D.D.Aseyev)

(TUBERCULOSIS, MENINGEAL, ther.
streptomycin, without subarachnoid admin.)
(STREPTOMYCIN, ther. use
tuberc., meningeal, without subarachnoid admin.)

AID P - 2152

Subject : USSR/Engineering-Electricity

Card 1/1 Pub. 28 - 3/9

Authors : V. A. Somov and V. K. Soldatov

Title : Use of simple electric indicators in tests and tuning of DVS (Internal Combustion Engines)

Periodical: Energ. byul., no.5, 14-16, My 1955

Abstract : This article describes the MPO-2 oscillograph, which can be used for testing and tuning of internal combustion engines more advantageously than the mechanical devices for the purpose. The MPO-2 oscillograph can register simultaneously as many as 8 stages of operation inside an internal combustion engine. Simple in construction and dependable for practical use, the MPO-2 oscillograph is highly recommended by the authors. Four sketches illustrate the text.

Institution: None

Submitted : No date

SOLDATOV, V.K.

"Commercial Ichthiology, Part II, Fishes of the Industrial Areas of the USSR". 1938
SO: From Bibliography of the Book," The Soviet Arctic Seas and Islands," by V. Yu. Vize, G.V. Gorbatskiy, G.F. Gorbunov, B.N. Gorodkov, and V.N. Saks Acad. Sci. USSR, 1946 Leningrad, Moscow...

SOLDATOV, V.P.

The Saryg-Sep intercollective building organization. Uch.zap. Tuv.nauch.-issl.inst.iaz.lit.i ist. no.9:62-71 '61. (MIRA 15:5)
(Kaa-Khemskyi District--Farm buildings)
(Kaa-Khemskyi District--Interfarm cooperation)

LEKHNITSKIY, S.G. (Lekhnitskiy); SOLDATOV, V.V. (Ural'sk)

Effect of the position of an elliptic hole on stress concentration in an orthotropic plate subjected to stretching. Izv. AN SSSR. Otd. tekh.nauk.Mekh. i mashinostr. no. 1:3-8 Ja-F '61. (MIRA 14:2)

(Elastic plates and shells)

SOLDATOV, V.V. (Ural'sk)

Stress concentration in an orthotropic plate weakened by an elliptic hole under pure shearing and pure bending conditions. Izv.AN SSSR.Otd.tekh.nauk.Mekh.i mashinostr. no.3:124-126 My-Je '63. (MIRA 16:8)

(Elastic plates and shells)

SOLDATOV, V.Ye.

Saluzid in the treatment of tuberculous meningitis in adults.
Probl. tub. no.6:16-21 N-D '55. (MLRA 9:2)

1. Iz meningitnogo otdeleniya (zav.-prof. I.M. Sorkin) Moskovskogo oblastnogo nauchno-issledovatel'skogo tuberkuleznogo instituta (dir. S.A. Chesnokov, zam. Direktora po nauchnoy chasti- prof. D.D. Aseyev)
(TUBERCULOSIS, MENINGEAL, ther.
isoniazide)
(NICOTINIC ACID ISOMERS, ther. use.
tuberc., meningeal isoniazid, in meningeal tuberc)

SOLDATOV, V. Ye., Cand Med Sci (diss) -- "The treatment of tubercular meningitis without subarachnoidal injection of drugs, in adults and adolescents". Moscow, 1960. 19 pp (S cond Moscow State Med Inst im N. I. Pirogov), 250 copies

(KL, No 11, 1960, 138)

SOLDATOV, V.Ye.

Treatment of tuberculous meningitis without subarachnoid administration of medicinal substances; late results. Sov. med. 24 no. 2:109-116 F '60. (MIRA 14:2)

1. Iz meningitnogo otdeleniya (zav. - prof. I.E. Sorkin) Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza (direktor - kand.med.nauk V.F. Chernyshev, zamestitel' direktora po nauchnoy chasti - prof. D.D. Aseyev) Ministerstva zdravookhraneniya RSFSR.
(MENINGES—TUBERCULOSIS)

VYSOKOVA, T.M., kand.med.nauk; AGRACHEV, G.I., kand.med.nauk; KIDANOVA, Z.S.; SOLDATOV, V.Ye., kand.med.nauk

Functional state of respiratory organs and the cardiovascular system in patients with fibrocavernous pulmonary tuberculosis. Probl. tub. 42 no.3:13-18 '64. (MIRA 18:1)

1. Otdeleniye funktsional'noy diagnostiki i fizicheskikh metodov lecheniya (rukovoditel' S.R.Lachinyan) i 3-ye terapevticheskoye otdeleniye (rukovoditel' - prof. I.E.Sorkin) Moskovskogo nauchno-issledovatel'skogo instituta tuberkuleza (direktor - T.P.Mochalova; zamestitel' direktora po nauchnoy chasti - prof. D.D.Aseyev) Ministerstva zdravookhraneniya RSFSR.

SOLDATOV, V.V.

Linear programming problem with random constraints. Sib. mat. zhur. 6 no.3:705-710 My-Je '65. (MIRA 18:8)

SOV/32-24-9-15/53

AUTHORS: Zhukhovitskiy, A. A., Kryukov, S. N., Soldatov, Ye. A.

TITLE: A Non-Isothermal Method for the Determination of Diffusion Properties (Neizotermicheskiy metod opredeleniya diffuzionnykh kharakteristik)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 9, pp 1071-1074 (USSR)

ABSTRACT: If the determinations mentioned in the title are carried out by the isothermal method, a larger number of measurements is involved, and temperatures must be maintained strictly constant (by means of a thermostat). In non-isothermal measurements, these disadvantages can be avoided, and several processes can be observed. A description is given of the method mentioned in the title, as well as of a simple device (a line drawing of which is given) for non-isothermal annealing. After the solving of mathematical equations, it is stated that the method of thin layers had to be modified. From the description of the device and the technique employed it is apparent that the method was tested by the self-diffusion of silver, using the Ag^{110} isotope. Amongst others, a graphic method is suggested in the derivation of the calculation equations. All the results obtained are

Card 1/2

A Non-Isothermal Method for the Determination of Diffusion Properties

given close to those in the literature, as, for example, those obtained by Johnson (Dzhonson) (Ref 3).
There are 3 figures and 3 references, 2 of which are Soviet.

ASSOCIATION: Moskovskiy institut stali im. I. V. Stalina (Moscow Steel Institute imeni I. V. Stalin)

MEYYER, A.A.; SOLDATOV, Ye.A.; SUSHKOV, V.P.

Certain methods for measuring the lifetime of nonequilibrium charge carriers based on photoconductivity modulation. Zav.lab. 27 no.10:1221-1223 '61. (MIRA 14:10)
(Semiconductors) (Electrons)

MEYYER, A.A.; SOLDATOV, Ye.A.

Electron tube self-excitation circuit of a resonant light modulator. (MIRA 15:11)
Zav.lab. 28 no.11:1383-1384 '62.
(Scientific apparatus and instruments)

SOLDATOV, Ye.A.

Evaluating the heat resistance of wall enclosure elements under summer conditions in the Golodnaya Steppe. Sbor.nauch.trud.TashNIIS no.5:70-79 '63. (MIRA 18:1)

39161
S/120/62/000/003/027/048
E192/E382

9.3280

AUTHORS: Meyer, A.A. and Soldatov, Ye.A.

TITLE: A phase-shifter having a constant amplitude-output signal

PERIODICAL: Pribory i tekhnika eksperimenta, no3, 1962, 113

TEXT: The phase-shifter is based on a double triode (see Fig. 1), where the input signal is applied to the grid of the first half. The phase-shifting bridge R_1R_2RC forms the cathode circuit of the first triode so that a high input impedance is achieved. The phase-shifted signal is taken from the diagonal of the grid. The phase-shift φ between the input and the output voltages is determined by the formula $\tan(\varphi/2) = R\omega C$, where ω is the angular frequency. The amplitude of the output signal is independent of the phase-shift provided that the load across the diagonal is sufficiently high. In the circuit of Fig. 1 this is achieved by connecting the second triode across the diagonal so that R_2 forms the cathode load of this tube. A low

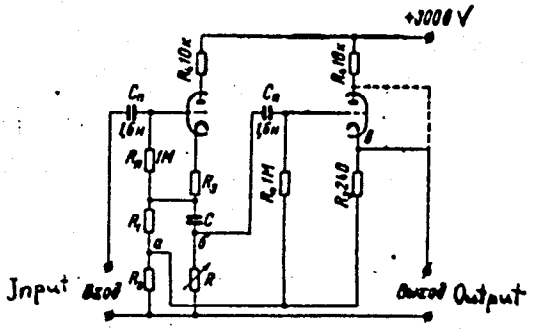
Card 1/2

A phase-shifter ....

impedance is achieved by taking the signal from the cathode load of the second triode. This signal can also be taken from the anode of the second triode, where it is additionally shifted by 180°. The shifter was used for compensating the phase-shift between the light signal and the photo-conductance signal in the phase method of measuring the life time of the minority carriers in germanium. There are 2 figures.

SUBMITTED: September 2, 1961.

Fig. 1:



MEYYER, A.A.; SOLDATOV, Ye.A.

Phase inverter with a constant-amplitude output signal. Prib. i tekh. eksp. 7 no.3:113 My-Je '62. (MIRA 16:7)
(Phase converters)

LEVIN, B.I.; ANPILOGOV, R.G.; BOGATYREV, A.F.; BRYKIN, S.V.; GOL'DMAN, M.S.; DAVYDOV, G.V.; ZADORIN, B.M.; ZERENINOV, A.M.; LAPUSHKIN, A.D.; LEDNEV, V.I.; MURAV'YEV, V.I.; OGANESOV, I.S.; PETROV, N.I.; SIDORIN, V.K.; SOLDATOV, Ye.G., obshchiy red.; KARAMYSHEV, I.A., red.; PESKOVA, L.N., red.; KHITROV, P.A., tekhn.red.

[Manual for studying the economics of construction in the transportation industry] V pomoshch' izuchaiushchim ekonomiku transportnogo stroitel'stva. Moskva, Gos.transp.zhel-dor. izd-vo, 1959. 271 p. (MIRA 12:7)
(Construction industry) (Transportation)

ZININ, V.F.; BOROVKOV, V.F.; SOLDATOV, Ye.I.

Rotary drilling of rocks in bauxite mines. Gor.zhur. no.8:32-33 Ag '62. (MIRA 15:8)

1. Ural'skiy nauchno-issledovatel'skiy proyektnyy institut mednoy promyshlennosti, Sverdlovsk).
(Boring)

ZININ, V.F.; BOROVKOV, V.F.; SOLDATOV, Ye.I.

Rotary drilling of rocks. Biul.tekh.-ekon.inform.Gos.nauch.-issl. inst.nauch.i tekh.inform. no.9:12-13 '62. (MIRA 15:9)
(Boring)

GOROKHOVSKIY, S.; SOLDATOV, Yu.

Measures of high national importance. Avt. transp. 41 no.3: 48-49 Mr '63. (MIRA 16:4)

1. Gosudarstvennaya avtomobil'naya inspektsiya RSFSR.

(Motor vehicles—Inspection

LUTSKIY, A.Ye.; SOLDATOVA, A.F.; OBUKHOVA, Ye.M.

Dipole moments of thymol and eugenols and their ethers and esters. Zhur.ob.khim. 33 no.7:2328-2331 Jl '63. (MIRA 16:8)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I.Lenina.
(Thymol--Dipole moments) (Eugenol--Dipole moments)

LUTSKIY, A.Ye.; SOLDATOVA, A.F.; VORONIN, Ye.M.

Intramolecular hydrogen bonding and absorption spectra in the ultraviolet. Part 12: Intramolecular hydrogen bonding between two electron-donor groups. Zhur.ob.khim. 35 no.12:2106-2111 D '65. (MIRA 19:1)

1. Khar'kovskiy politekhnicheskiy institut i Khar'kovskiy farmatsevticheskiy institut. Submitted April 28, 1964.

LUK'YEY, A.Ya.; SOLDATOVA, A.F

Intramolecular hydrogen bond and absorption spectra in the ultraviolet. Part 11: Intramolecular hydrogen bonding with a π-type proton acceptor. Zhur.ob.khim. 35 no.12:2099-2105 D '65. (MIRA 19:1)

1. Khar'kovskiy politekhnicheskiy institut i Khar'kovskiy farmatsevticheskiy institut. Submitted April 28, 1964.

DEMENT'YEV, G.P.; KARTASHEV, N.N.; SOLDATOVA, A.N.

Feeding habits and the practical significance of certain predatory birds in southwestern Turkmenia. Zool.zhur. 32 no.3:361-374 '53. (MLRA 6:6)

1. Biologo-pochvennyy institut Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova. (Turkmenistan--Birds of prey)

KARTASHEV, N.N.; SOLDATOVA, A.N.

New occurrence of the Turkmanian jerboa (Jaculus turcmenicum Vinogr. et Bond.) in Turkmenistan. Biul.MOIP. Otd.biol. 58 no.1:11-12 '53.
(MLRA 6:5)

(Turkmenistan--Jerboas) (Jerboas--Turkmenistan)

KHODASHOVA, K.S.; SOLDATOVA, A.N.

Observations on seasonal characteristics of the mobility of lesser susliks and on changes in the extent of their feeding areas in the clayey semi-arid trans-Volga region. Trudy Inst.geog. no.66:167-187 '55. (MLRA 8:7)

(Volga Valley--Susliks) (Ural Valley--Susliks)

SOLDATOVA, A.N.

Some characteristics of periodic phenomena in the life of the lesser suslik in the southern trans-Volga region. Trudy Inst.geog. no.66: 188-207 '55. (Volga Valley--Susliks) (MLRA 8:7)

GRUZDEV, V.V.; SOLDATOVA, A.N.; BOCHAROVA, O.M.

Summer feeding of foxes (Vulpes L.) in the Yeruslan Valley sands [with summary in English]. Zool.zhur. 36 no.9:1424-1426 S '57. (MIRA 10:10)

1.Biologicheskaya laboratoriya i kafedra zoologii pozvonochnykh biologo-pochvennogo fakul'teta Moskovskogo gosudarstvennogo universiteta i Institut morfologii zhivotnykh AN SSSR.
(Yerusian Valley--Foxes)
(Animals, Food habits of)

SOLDATOVA, A.N.

Effect of population density on the nature of the utilization of the territory by the suslik Citellus pygmaeus Pall. Zool. zhur. 41 no.6:913-921 Je '62. (MIRA 15:7)

1. State University of Moscow.
(West Kazakhstan Province--Susliks)
(Volgograd Province--Susliks)

SOLDATOVA, A.N.

Characteristics of the use of the territory by the lesser suslik at different periods of its life. Zool.zhur. 41 no.11:1706-1713 N '62. (MIRA 16:1)

1. Moscow State University. (Susliks)

SOLNTOVA, A.N.

Use of various methods of rodent marking in ecological studies.
Zool. zhur. 44 no.2:266-275 '65. (MIRA 18:5)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta.

SOLDATOVA, A.N.

Effect of population density and weather conditions on the migratory nature of lesser suslik. Nauch. dokl. vys. shkoly; biol. nauki no.1:37-41 '66. (MIRA 19:1)

1. Rekomendovana kafedroy zoologii pozvonochnykh Moskovskogo gosudarstvennogo universiteta. Submitted January 6, 1964.

[illegible]

[illegible] [illegible] Par-
[illegible] [illegible]lakopitayushchikh. [illegible] SSSR, t. [illegible], No. [illegible],
str. [illegible]-[illegible].

SO[illegible], [illegible]

Lbr., K. I. Skryabin All-Union Inst. Helminthology, -1944-45-.

"A Contribution to the Study of the Development Cycle In The Cestode Mesocestoides
Lineatus (Goeze, 1782), Parasitic of Carnivorous Mammals," Dok. AN, 45, No. 7, 1944;
"A Contribution to the Study of the Biology of Oribatei Mites, Intermediate Hosts of
Cestodes of the Family Anoplocephalidae," ibid., 46, No. 8, 1945.

SOLDATOVA, A. P.

Soldatova, A. P. "On the biology of Oribated ticks, intermediate hosts of Anaplocephala cestodes which are parasitic in sheep, large horned cattle, and horses", Sbornik rabot po gel'mintologii (Vsesoyuz. in-t gel'mintologii im. akad. Skryabina), Moscow, 1948, p. 209-13.

SO: U-3042, 11 March 53, (Letopis'nykh Statey, No. 10, 1949).

SOLDATOVA, A.S.

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18.7200

SOV/137-59-7-15169

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 7, pp 123 - 124 (USSR)

AUTHORS: Zemzin, V.N., Petrov, G.L., Smirnova, I.D., Soldatova, A.S., Kakstov, A.A., [illegible]

TITLE: Welding Cast Austenitic LA3 Steel

PERIODICAL: Tr. Sevzk. mashinostr. z-da, 1958, Nr 4, pp 104 - 118

ABSTRACT: Austenitic Cr-Ni LA3 steel is used in steam equipment production at super-high parameters. Electrodes were designed and technology of welding-up casting defects and welding slide-plates to rolled Cr-Ni-steel pipes was developed. Requirements to heat-resistance of weld joints are the same as to steel for machine part castings: at 580 - 600°C and 100,000 hours operation σ_{dl} was $\geq$ 14 kg/mm^2; and σ_{pl} was $\geq$ 6 kg/mm^2 at an elimination of 1.10^{-5} %/hour and $a_k \geq 4$ kgm/cm^2. Formation of hot cracks in the seam metal are characteristic of LA3 steel welding. S, Si, Mn, and sometimes P, further hot crack formation by the development of low-melting eutectics. The presence of a second phase, δ -ferrite in the given steel, reduces the probability of hot crack formation in the seam metal and granulates the structure. Taking into account the dilution of the seam

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Welding Cast Austenitic LA3 Steel

metal by the base metal, the ferrite content in the build-up metal is considered to be 5 to 7%. Increased ferrite amount arranged in continuous "chains" entails σ-phase formation and embrittles the metal in ageing. The seam metal was alloyed with C, Cr, Ni, Mn, Mo and V through the covering. The ferrite amount was controlled by varying the Cr content. The following requirement to the chemical composition of built-up metal (with KTI-5 electrodes) was established (in %): C 0.08 - 0.15; Si 0.4 ; Mn 2.8 - 4.0; Mo 1.8 - 2.7; V 0.35 - 0.50; S $\leq$ 0.03; P $\leq$ 0.04, for Cr and Ni four variants are given within 9.6 - 13.5 Ni and 17.7 - 21.3 Cr respectively. The electrode wire was made of "EI400" or "Kh18N11M" steel. Mechanical properties and endurance of the built-up metal were satisfactory after ageing for 10 hours at 800°C. From 1952 to 1956 the plant consumed 21 tons of KTI-5 electrodes for welding-up casting defects in 5[illegible] - 8[illegible] kg ingots, cast of "LA3" steel, and up to 12 tons for "Kh22N12" steel castings.

V.B.

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Card 2/2

LEVIN, Ye.Ye., kand.tekhn.nauk; ZEMZIN, V.N., kand.tekhn.nauk; MASALEVA, Ye.N., inzh.; SNITKO, M.N., inzh.; BABAYEVA, Ye.V., inzh.; SOLDATOVA, A.S., inzh.

Economically alloyed EI402M-L cast steel for turbines and equipment operating with metal temperatures up to 650°C. Energomashinostroenie 9 no.1:30-33 Ja '63. (MIRA 16:3)

(Steel) (Gas turbines)

SOLDATOVA, A. V.

PA 237T6

USSR/Medicine - Public Health Dec 52

"Duties of Medical Assistants in Prevention of Suppurative Skin Diseases and of Diseases of Grippe Among Workers in the Peat Industry," A. V. Soldatova

"Fel'dsher i Akusherka" No 12, pp 43-45

The collective of medical workers was instructed by the Ministry of Health of the USSR to use bactericidal paper in the treatment of small fresh septic wounds and burns. Since the fall of 1952, experiments with gramicidin for the prevention of acute infections of the upper respiratory tract have been conducted. This work has been carried out by medical assistants in conjunction with the usual preventive and therapeutic measures. By early treatment of microtrauma on hands and feet, they have been able to reduce incidence of suppurative diseases through extensive use of bactericidal papers. They were also able to prevent the development of acute infections of the upper respiratory tract.

237T6

SKRYAGIN, L.; SOLDATOVA, G.

Foreign methods of vessel pushing. Rech.transp. 16 no.10:44-46 O '57. (MIRA 10:12)
(Towing)

L 32640-66 EWT(1)/FCC GW

ACC NR: AP6016921 (A) SOURCE CODE: UR/0006/66/000/005/0059/0062

AUTHOR: Soldatova, G. I.

ORG: none

TITLE: Some problems in preparing climatic maps of mountainous regions

SOURCE: Geodeziya i kartografiya, no. 5, 1966, 59-62

TOPIC TAGS: weather map, weather station, orography

ABSTRACT: The need is pointed out for accurate maps of climatic factors, along with their frequent inadequacy because of lack of sufficient coverage by weather stations. If the kind of relationship existing between climatic and other natural factors is known, however, a better basis may be found for outlining the distribution of air temperature and precipitation in mountainous regions. These factors are, primarily, soil type, plant distribution, and runoff. These all directly reflect climate, and, if knowledge of them is available and is properly utilized, it may be possible to draw isotherms and isohyets that correspond more closely to the actual distribution of air temperature and precipitation than those drawn from meager weather data and knowledge of the orographic features. This supplementary material is considered essential if accurate maps are to be made. One problem with present distribution of data is the fact that most weather stations are located in

Card 1/2 UDC: 528.94:551.58(23)

YESAKOVA, S.Ye.; SOLDATOVA, I.N.

Influx of Teredinidae into the Sea of Azov. Priroda 48 no.6: 115-116 Je '59. (MIRA 12:5)

1.Institut okeanologii AN SSSR, Moskva.
(Azov, Sea of--Ship worms)

RYABCHIKOV, P.I.; SOLDATOVA, I.N.; YESAKOVA, S.Ye.

First stage of the settlement of shipworms in the Sea of Azov. (MIRA 15:1)
Trudy Inst. okean. 49:147-155 '61.
(Azov, Sea of--Shipworms)